



# UNITED STATES PATENT AND TRADEMARK OFFICE

*CEM*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,638	02/24/2005	Martin Hofmeister	27392/26949	2118

4743 7590 07/10/2007  
MARSHALL, GERSTEIN & BORUN LLP  
233 S. WACKER DRIVE, SUITE 6300  
SEARS TOWER  
CHICAGO, IL 60606

EXAMINER
----------

DESTA, ELIAS

ART UNIT	PAPER NUMBER
----------	--------------

2857

MAIL DATE	DELIVERY MODE
-----------	---------------

07/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/525,638

Applicant(s)

HOFMEISTER, MARTIN

Examiner

Elias Desta

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 10-13, 18-20 and 25-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### *Detailed Action*

#### *Response to Amendment*

1. Applicant's remarks see amendment, filed 4/9/2007, with respect to the rejections of claims 1 and 4-24 under 35 U.S.C. 101 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. The amendment to the antecedent basis objection of claims 4, 12 and 19 has been accepted. The Examiner acknowledges the cancellation of claims 2, 3, 6-9, 14-17 and 21-24.

However, upon further consideration, a new ground of rejection is made in view Tsukahara et al. (U.S. Patent 4,827,516, hereon Tsukahara). Examiner acknowledges the newly added claims 25-34.

#### *Explanation of Rejection*

##### Claim rejection – 35 U.S.C. 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 5 10-13, 18-20 and 25-34 are rejected under 35 U.S.C. 102(b) as anticipated by Tsukahara et al. (U.S. Patent 4,827,516, hereon Tsukahara).

In reference to claims 1 and 25: Tsukahara teaches a method of determining an envelope curve of a modulated input signal (see Tsukahara, Abstract and Fig. 1, 2A and 2B). The method comprises:

- Generating digital samples by digital sampling a modulated signal (see Tsukahara, column 10, lines 43-47);
- Generating Fourier-transformed samples by Fourier transforming the digital samples (see Tsukahara, Fig. 2B, Fourier-transform circuit);
- Generating sideband-cleared, Fourier-transformed samples by removing a range with positive frequencies from the Fourier-transformed samples (see Tsukahara, Fig. 2B, spectrum extractor);
- Generating inverse-transformed samples by inverse Fourier-transforming the sideband cleared, Fourier-transformed samples (see Tsukahara, Fig. 2B, section 114);
- Calculating the absolute value of the inverse-transformed samples, and displaying an envelope curve of the modulated input signal based on the absolute values of the inverse-transformed samples (see Tsukahara, Figs. 3 and 29).

With regard to claims 4, 5 and 26: Tsukahara further teaches that the system includes calculating the logarithms of the absolute values of the inverse-transformed samples relative to an effective value of the inverse transformed samples (see Tsukahara, Fig. 29).

With regard to claims 10 and 28: Tsukahara further teaches the method of generating sideband-cleaned, Fourier-transformed samples by moving a range with positive frequencies from

Art Unit: 2857

the Fourier-transformed signal samples includes removing a level component at a zero frequency because the variable frequency is done as the middle point between the two closest peaks to the frequency cut that come out of the peak continuation (see Tsukahara, Figs. 18 and 18B).

With regard to claims 11, 18, 29 and 32: Tsukahara further teaches that the method includes processing the inverse-transformed samples further only in such limited range that a cyclic continuation, which is caused by the Fourier transform and inverse Fourier transform, is suppressed (see Tsukahara, Fig. 18A).

With regard to claims 12, 19, 30 and 33: Tsukahara further teaches that the method includes calculating the logarithms of the absolute value of the inverse-transformed samples relative to an effective value of the inverse-transformed samples (see Tsukahara, Figs. 8A and 8B).

With regard to claims 13, 20, 27, 31 and 34: Tsukahara further teaches that the frequency distribution of the logarithms as a function of the logarithmized level (see Tsukahara, Figs. 9A and 9B).

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Bonada (IUA Article, 'Automatic Technique in Frequency Domain for Near Lossless Time Scale Modification of Audio') teaches a system for obtaining a near-lossless, time-scaled, audio modification without any other perceptual change.

Art Unit: 2857

b. Nitta et al. (U.S. Patent 4,209,672) teaches a method and apparatus for measuring characteristics of a loudspeaker.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, ***THIS ACTION IS MADE FINAL***. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Fri (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571)-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2857

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elias Desta  
Examiner  
Art Unit 2857

- E.D.

- June 29, 2007

*Hal Wachstein*  
HAL WACHSTEIN  
PRIMARY EXAMINER  
*AVR 28 2*